

REMARKS

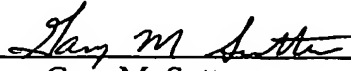
Claims 1 and 2 were rejected under 35 U.S.C. 102(b) as being anticipated by Nachtman et al. (US 5,897,946). The Examiner noted that the manufactured composite particles of Nachtman et al. contain gypsum in the sealant layer, and that gypsum consists of calcium sulfate dihydrate.

Claim 1 has been amended to state that the sulfur is in the form of elemental sulfur or a sulfide. There is no teaching or suggestion in Nachtman et al. to add sulfur to the particles in one of these forms. Nachtman et al. adds gypsum because it is capable of setting and hardening under water to create a hardened barrier layer. Nachtman et al. does not mention that the gypsum contains sulfur, and there is no mention elsewhere in the patent of adding sulfur. In particular, there is no suggestion to add sulfur or any other material for the purpose of sequestering metals. Since gypsum hardens under water, it would not be expected that the sulfate present in the gypsum would be very effective for sequestering metals. Nachtman et al. describes forming a barrier layer over contaminated sediments to keep the contaminants (e.g., metals) away from the overlying water; there is no suggestion that there would be any benefit to adding sulfur to the product to sequester metals. Therefore, it is respectfully submitted that claims 1 and 2 are novel and nonobvious over the Nachtman et al. patent.

New claim 18 states that the product contains sulfur in a form that is effective to sequester metals. As discussed above, in Nachtman et al. the gypsum hardens so that the sulfate would not be expected to be very effective for sequestering metals.

New claim 20 states that the sealant layer comprises clay, gypsum and sulfur.
There is no suggestion in Nachtman et al. to add sulfur in addition to gypsum and clay.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Gary M. Sutter", is written over a horizontal line.

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